

Notice of Allowability

Application No.

10/016,685

Examiner

Joseph P. Martinez

Applicant(s)

SONG ET AL.

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9-27-04.
2. ☒ The allowed claim(s) is/are 7-34 and 44-56.
3. ☒ The drawings filed on 17 December 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 9-14-04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Allowable Subject Matter

Claims 7-34 and 44-56 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art taken alone or in combination fails to anticipate or fairly suggest the limitations of the claims, in such a manner that a rejection under 35 USC 102 or 103 would be proper. The prior art, Jachimowicz et al. (5224198) fails to teach a combination of all the claimed features as presented in independent claims 7-9, 20, 44, 50 and 56.

Specifically regarding claim 7, wherein the claimed invention comprises a wearable display system comprising a waveguide, display panel, a plurality of gratings for diffraction, magnifying lens and specifically, at least one shutter to alternately block a plurality of the signals output by the display panel in the waveguide, to produce a three-dimensional image, as claimed.

Specifically regarding claim 8, wherein the claimed invention comprises a wearable display system comprising a waveguide, display panel, a plurality of gratings for diffraction, magnifying lens and specifically, wherein at least one magnifying lens is moveable along a predetermined length of at least one waveguide, as claimed.

Specifically regarding claim 9, wherein the claimed invention comprises a wearable display system having a binocular structure comprising a first grating for diffraction, a plurality of second gratings for diffraction, a plurality of magnifying lenses, and specifically, a display panel at the center of the waveguide, as claimed.

Specifically regarding claims 20 and 44, wherein the claimed invention comprises a wearable display system having a binocular structure comprising a waveguide, two first gratings for diffraction, second gratings for diffraction, magnifying lenses, and specifically, two display panels respectively placed on opposite sides of the waveguide, as claimed.

Specifically regarding claim 50, wherein the claimed invention comprises a wearable display system having a monocular structure comprising a waveguide, display panel, first grating for diffraction, second grating for diffraction, magnifying lens and specifically, the second grating is oriented perpendicular to the first grating in the waveguide, as claimed.

Specifically regarding claim 56, wherein the claimed invention comprises a wearable display system comprising a waveguide, display panel, a plurality of gratings for diffraction, magnifying lens and specifically, wherein the signal propagates to left and right eyes of a user with a time difference, thereby producing a three-dimensional image.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph P. Martinez whose telephone number is 571-272-2335. The examiner can normally be reached on M-F 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
10-12-04


Hung Xuan Tang
Primary Examiner